Opening Statement of the Honorable Greg Walden
Subcommittee on Energy
"Powering America: The Role of Energy Storage in the Nation's Electricity System"
July 18, 2018

(As prepared for delivery)

Today we continue our "Powering America" hearing series by taking a closer look at what a lot of people think will be the next big game changer for our nation's electricity sector — large-scale battery storage. For years, companies have been working to develop and pioneer battery storage technology that is both cost effective and scalable, and we are now at the point where that technology is coming to fruition and being deployed on the grid in a meaningful way.

The potential benefits of battery storage are substantial. Batteries allow us to store energy when demand and prices are low and then release that energy when demand and prices are high. This not only optimizes the way our electricity system works, it also lowers electricity costs, meaning that American families can keep more money in their pockets after paying their monthly electricity bills.

Storage also allows for a more reliable and flexible electricity system. By strategically placing large-scale energy storage at various locations across the system, grid operators have more tools available at their disposal to protect the grid from power disruptions. Additionally, battery storage can help lower congestion on the transmission system and can even serve as an alternative to building out expensive transmission lines through the property of private land owners.

My home state of Oregon has been ahead of the curve when it comes to recognizing the benefits of energy storage and many of our electric utilities are integrating energy storage projects. The Pacific Northwest is home to the Department of Energy's Pacific Northwest National Laboratory (PNNL), where researchers work to advance and develop energy storage technologies for grid-scale deployment. PNNL has tens of thousands of square feet of laboratory space dedicated to accelerating the development of energy storage technologies. In 2015, PNNL opened its, "Advanced Battery Facility" which was built to bridge the gap between fundamental battery research and commercial-scale battery development.

Clearly, there is great potential for the role that large-scale battery storage can play in the nation's electricity system, but before that potential is fully realized there are a number of barriers and challenges that we still must tackle. These challenges

range from technological limitations and costs, to wholesale market participation rules.

In order to address some of the challenges faced by energy storage, FERC recently issued Order No. 841 directing the RTOs and ISOs to amend their market rules in order to better accommodate the participation of electric storage technologies. Right now, grid operators are in the process of implementing the requirements and directives contained in Order No. 841, which is something that this committee will continue to monitor as things move forward.

Last fall, as part of the Energy Subcommittee's "Powering America" hearing series, we examined technology's role in the electricity system where energy storage was a main topic of discussion. During that hearing, we heard from a witness who provided an example of how market rules can create barriers to competition for energy storage in wholesale electricity markets. This witness described a Regional Transmission Organizations (RTO)/Independent System Operators (ISO) rule with a definition of a storage product that only accommodated older storage technologies, such as storage that utilized a flywheel. This outdated definition did not allow for newer, more advanced energy storage technologies, such as lithium-ion batteries, to participate and be fully compensated in wholesale electricity markets. Today's hearing gives us an opportunity to better understand barriers such as this, and I look forward to discussing further potential policy solutions.

Joining us this morning is a panel of witnesses with extensive and varied experience developing, operating, and regulating large-scale energy storage. I would like to thank them for being here and I look forward to hearing their perspectives on how energy storage can strengthen the grid and benefit consumers.